

Claims

1. Refrigerating apparatus for chilling an object, the refrigerating apparatus forming part of a refrigerator and comprising a chamber having a longitudinal axis, an inlet and an outlet spaced along the longitudinal axis, the refrigerating apparatus further comprising means for generating a fluid flow, characterised in that rotation means are provided for causing the fluid flow to follow a helical path about the longitudinal axis within the chamber between the inlet and the outlet.
2. Refrigerating apparatus as claimed in claim 1, wherein the inlet is arranged tangential to the chamber so as to cause the fluid flow to follow a helical path about the longitudinal axis within the chamber.
3. Refrigerating apparatus as claimed in claims 1 or 2, wherein the outlet is arranged tangential to the chamber.
4. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the chamber is cylindrical.
5. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the longitudinal axis is substantially vertical.
6. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the inlet and the outlet are at opposite ends of the chamber.
7. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the fluid flow is a chilled airflow.
8. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the means for generating the fluid flow comprises a fan and an evaporator, the evaporator housing a refrigerant.

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9. Refrigerating apparatus as claimed in claim 8, wherein the outlet is arranged so as to pass the fluid flow to the evaporator for recirculation.

5 10. Refrigerating apparatus as claimed in any one of the preceding claims, wherein a support is provided for supporting the object spaced from a wall of the chamber.

11. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the chamber is dimensioned so as to hold a bottle of wine.

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12. Refrigerating apparatus as claimed in any one of the preceding claims, wherein the apparatus comprises a plurality of chambers, each chamber being dimensioned so as to house an object to be chilled.

15 13. Refrigerating apparatus substantially as hereinbefore described with reference to any one of the embodiments shown in the accompanying drawings.

14. A method of chilling an object in a refrigerator, comprising the steps of:

- 20 a) placing an object to be chilled in a chamber in the refrigerator, the chamber having a longitudinal axis, an inlet and an outlet spaced along the longitudinal axis;
- b) introducing a fluid flow to the inlet of the chamber;
- c) causing the fluid flow to follow a helical path about the longitudinal axis and around the object to be chilled;

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- d) allowing the fluid flow to exit the chamber via the outlet.

15. A method of chilling an object as claimed in claim 14, wherein the fluid flow is introduced tangentially to the chamber.

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16. A method of chilling an object as claimed in claim 14 or 15, wherein the fluid flow passes at least twice around the object before being allowed to exit the chamber.

5 17. A method of chilling an object as claimed in any one of claims 14 to 16, wherein the fluid flow is caused to flow between a wall of the chamber and a support on which the object is placed.

10 18. A method of chilling an object as claimed in any one of claims 14 to 17, wherein the fluid flow is chilled prior to entry into the chamber.

19. A method of chilling an object as claimed in claim 18, wherein the fluid flow is passed through an evaporator.

15 20. A method of chilling an object as claimed in claim 19, wherein the fluid flow is returned to the evaporator for recharging after exiting the chamber via the outlet.

21. A method of chilling an object as claimed in claim 20, wherein the recharged fluid flow is introduced to the inlet of the chamber.

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22. A method of chilling an object substantially as hereinbefore described with reference to any one of the embodiments shown in the accompanying drawings.

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